

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	0.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,220	_	02/06/2001	Steve Alexander Whitlock	16600.105006	5736
20786	7590	09/22/2005		EXAM	IINER
		OING LLP	WEBB, JA	WEBB, JAMISUE A	
191 PEACHTREE STREET, N.E. 45TH FLOOR				ART UNIT	PAPER NUMBER
ATLANTA, GA 30303-1763				3629	
				DATE MAILED: 09/22/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	09/778,220	WHITLOCK ET AL.					
Office Action Summary	Examiner	Art Unit					
	Jamisue A. Webb						
The MAILING DATE of this communication ap		the correspondence address					
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING I Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICA .136(a). In no event, however, may a reply d will apply and will expire SIX (6) MONTH te, cause the application to become ABAN	ATION.  ly be timely filed  IS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 27.	<u>June 2005</u> .						
2a)⊠ This action is <b>FINAL</b> . 2b)□ Th	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
3) Since this application is in condition for allowed	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-28</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-28</u> is/are rejected.	Claim(s) <u>1-28</u> is/are rejected.						
7) Claim(s) is/are objected to.	Claim(s) is/are objected to						
8) Claim(s) are subject to restriction and/	or election requirement.						
Application Papers							
9) The specification is objected to by the Examir	ner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119		•					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:							
1. Certified copies of the priority documer	·- <u> </u>						
2. Certified copies of the priority documer	2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)	•						
1) Notice of References Cited (PTO-892)	4) Interview Sun						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date 6) Other:							

ne

Art Unit: 3629

#### **DETAILED ACTION**

#### Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 2. Claims 1-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicant's invention claims a method for supporting the efficient transfer of baggage and calculating potential assignments and routes for the baggage. The claims even claim an equation used for calculating the cost of the assignment to determine the assignment solution. The specification fails to include a working example of how to determine the assignments and calculate assignments and routes according to the variables claimed. Therefore one of ordinary skill in the art would not be able to read the specification and determine how to calculate the potential assignments and routes and determine the best assignment and route, without undue experimentation.
- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Application/Control Number: 09/778,220 Page 3

Art Unit: 3629

4. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- 5. Claims 1 and 20 recites the limitation "the selected assignments and routes" in line 13 and 14. There is insufficient antecedent basis for this limitation in the claims.
- 6. With respect to Claim 15: the phrase "at a last close connection gates" is indefinite. This phrase is grammatically incorrect. It is unclear to the examiner if this is one gate or multiple gates.

### Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 8. Claims 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Glass et al. (6,278,965).
- 9. With respect to Claim 26: Glass discloses the use of a system with a central computer system (106), a server computer (104) running a software module (see Figure 1), one client computer (102) coupled to a server, and a second client coupled to a server (110). The examiner notes that Claims 26-28 are drawn to a network, or system claim, which gives weight to structure only. The descriptive limitations in the claims (such as for managing traveler processes and for

transmitting passenger data, for calculating baggage assignments, a tug client and a dispatch client) are more recitations of intended use. It has been end that a recitation with respect to the manner in which a claimed apparatus is indeed to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

- 10. With respect to Claim 27: Glass discloses the server having access to multiple databases (115 and 117) where information can be retrieved.
- 11. With respect to Claim 28: See Column 5, line s 45-47.

## Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claims <u>1</u>-16 and <u>20</u>-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA) in view of Koini et al. (6,580,046).
- 14. With respect to Claims 1 and 20: AAPA, as shown in the "Background" of the Invention, teaches a method for transferring baggage from an inbound flight to connecting flights comprising the steps:
  - a. Identifying an inbound flight (which the examiner considers to be a form of conveyance),
  - b. Receiving data concerning the baggage,
  - c. Calculating assignments for baggage transfer,

d. Calculating potential routes for the baggage and selecting an efficient route

- e. Distributing the selected assignments and routes, and
- f. Delivering the baggage to one or more of the outbound flights.

AAPA teaches the claimed invention except for the use of a software module operating on a server which performs the above steps a-e. Koini discloses the use of a software module/program for the automated conveying, sorting and loading of baggage items, which identifies flight information along with the baggage data (Column 2, lines 36-40) and calculates the optimal assignments and routes (Column 2, lines 40-44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of AAPA by using the baggage handling software module of Konini to automate and optimize the calculations of assignments and routes, in order to provide an automated and efficient process for baggage transfer (See Koini, abstract and column 2).

- 15. With respect to Claims 2, 3 and 21: AAPA discloses in the background that tug drivers inform the dispatcher when they are empty or available and also discloses that the dispatcher is notified when a flight is coming in (in bound) and the flight information and flight number are given to the dispatcher. The combination of AAPA and Koini disclose the dispatcher's duties are done by the automated process, or the computer of Koini. Therefore, together they disclose the step of notifying the software module that tugs are available for delivering baggage as well as the steps of notifying a dispatch client of an inbound flight number and transmitting the flight number to the software module.
- 16. With respect to Claim 4: Koini discloses the flight as well as the baggage data (which the examiner considers to be passenger data also, due to the fact that baggage and passengers are

Art Unit: 3629

linked) is obtained from airport systems and the obtaining of the data is old and well known in the art (See Column 1, lines 31-32). What these systems are called is non-functional descriptive data. The method is obtaining the data from systems, and whether the system is a flight performance evaluation system or an operations support system or some other system with a different name is not functionally related to the method and therefore does not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F .2d 1381, 1385, 217 USPQ 401, 404 (Fed.Cir.1983); *In re Lowry*, 32 F .3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

- 17. With respect to Claims 5, 6 and 22: AAPA discloses that dispatchers use variables such as driver, baggage and stop parameters to determine the best assignment and creates solutions for baggage transfer, however fails to disclose calculating the cost for each assignment and saving the solution with the lowest cost. Koini discloses the method of determining the optimal assignment for baggage transfer. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, absent showing evidence of unexpected results. *In re Aller*, 105 USPQ 233. Furthermore it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art, absent evidence of unexpected results. *In re Boesch*, 617 F...2d.
- 18. With respect to Claim 7: It would be obvious to one of ordinary skill in the art that when determining the solution for baggage, that it would be all the baggage that needs connecting from an inbound flight, due to the fact that all baggage that is not at the final destination would need to be further shipped and therefore transferred.

Page 7

Art Unit: 3629

- 19. With respect to Claim 8: AAPA discloses that the zones of an airport are taken into effect when calculating the assignment solutions.
- 20. With respect to Claim 9: It is old and well known in the art, that when given multiple options, that options that exceed a defined limitation are eliminated. Therefore it would have been obvious to eliminate possible assignment solutions that exceed certain parameters or limits.
- 21. With respect to Claim 10: Koini discloses a method of determining the optimal assignment for baggage transfer, and as disclosed above, the cost is merely a variable in the determination and it would be within the skill of one of routine skill in the art, to optimize the solutions (baggage assignments), therefore the cost are merely an equivalent way to optimize the baggage assignments, absent showing evidence of unexpected results.
- 22. With respect to Claims 11, 12, 23 and 24: AAPA discloses that dispatchers use variables such as driver, baggage and stop parameters to determine the best assignment and creates solutions for baggage transfer, however fails to disclose calculating the total distance and saving the best solution as one of the shortest distance. Koini discloses the method of determining the optimal assignment for baggage transfer. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, absent showing evidence of unexpected results. *In re Aller*, 105 USPQ 233. Furthermore it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art, absent evidence of unexpected results. *In re Boesch*, 617 F .2d.

Art Unit: 3629

- 23. With respect to Claim 13: AAPA, in the background of the invention, discloses the tug driver's route for completing the assignment is typically created by starting with close connections that are departing shortly after the inbound arrival.
- 24. With respect to Claim 14: AAPA, in the background of the invention, discloses the route solution contains the gates the driver has to make stops at, which would inherently contain all the gates the driver has to stop at, in order for the driver to be informed of the route.
- 25. With respect to Claims 15 and 16: AAPA discloses that dispatchers use variables such as zones, gates and stops to determine the best routes for the driver. Koini discloses the method of determining the optimal assignment for baggage transfer. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, absent showing evidence of unexpected results. *In re Aller*, 105 USPQ 233. Furthermore it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art, absent evidence of unexpected results. *In re Boesch*, 617 F .2d.
- 26. Claims 17-19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Koini, in further view of Jones (6,748,320).
- 27. With respect to Claims 17-19 and 25: AAPA discloses the dispatcher notifies the tug driver of the routes, along with assignments, but fails to disclose the notification given to them by clients mounted on the vehicles. Jones discloses the use of a system for delivering packages, where the driver of the transportation vehicle has a client device located in the truck, for the dispatcher to send delivery information to the vehicle at any point during the delivery route (see

Art Unit: 3629

abstract, Figure 1 and Column 10, lines 36-56 and Column 11, lines 6-37, Column 17, lies 32-36). Jones further states that the communication system can be used in many other types of vehicles and systems (See Column 4, lines 36-44). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify AAPA and Koini, to include the vehicle communication system of Jones, in order to provide a more efficient form of delivery where more items can be delivered on one vehicle. (See Jones, Columns 1 and 2).

## Response to Arguments

- 28. Applicant's arguments filed 6/27/05 have been fully considered but they are not persuasive.
- 29. With respect to Applicant's argument that the specification is fully enabled: the applicant has pointed to the specification and states that there are examples representing the combinations of potential assignments and calculating assignment solutions. The specification however, gives general descriptions of the variables used in the calculation of assignments, however the specification lacks specific examples, i.e. a working example, of how the variables are measured, and how the detailed calculation is performed. The application, in the specification as well as the claims, uses a specific formula to calculate the efficient solution. The specific formula uses multiple variables, therefore one of skill in the art would not be able to look at the specification and determine/calculate the efficient solution without undue experimentation. The rejection stands as stated above.

Art Unit: 3629

- 30. With respect to the 112 2<sup>nd</sup> paragraph rejection: Applicant has amended the claims to overcome the lack of antecedent basis, however "the selected assignments and routes" appears twice in the independent claims, and it still exists in the claims.
- 31. With respect to Applicant's arguments that Glass does not recite the claim limitations of the system in Claim 26: The applicant has stated that the structure of Glass is different from the network in the recited claims, and Glass does not disclose a server computer connected to the central computer system operating an electronic dispatch software module for calculating baggage assignments and routes. The system of Glass includes a server, which is connected to the overall computer system. Structurally the same as the claimed invention. The applicant has also argued that the subsystems of Glass are not coupled to the server computer. The applicant has not provided any other structure to the claims besides naming the elements as server and clients. It is the examiner's position that the sub-systems of Glass function as clients, and therefore, the same structure as what is claimed. (See Column 11, lines 8-12 and column 12, lines 52-58)
- 32. With respect to Applicant's argument that the limitations in Claims 26 are not merely recitations of intended use, but provide limitations to the system claim as supported by the specification: As stated above, the examiner considers the system of Glass and the claimed system to be structurally the same, therefore Glass is fully capable of performing the method limitations claimed. Therefore rejection stands as stated above.
- 33. With respect to Applicant's arguments that the AAPA does not disclose operating the software module at the server to calculate a plurality of potential assignments for baggage transfer from the data and to select an efficient solution of assignment: Applicant has argued that

Art Unit: 3629

the solution of the AAPA may not be the most accurate or efficient solutions. Where as they may not be the most accurate or efficient, they may be. Furthermore, the claim recites "an accurate and efficient solution", the claim does not state "the most" accurate and efficient solution.

- 34. With respect to Applicant's argument that the AAPA does not teach or suggest electronically distributing the selected efficient solution of assignments and selected efficient routes from the server to clients connected to the computer network: This limitation is rejected using the Koni reference, not AAPA.
- 35. With respect to the Applicant's argument that Koni does not disclose operating the software module at the server to calculate a plurality of potential assignments for baggage transfer from the data and to select an efficient solution: Koni is not relied upon to teach this limitations, the AAPA is relied upon for the calculation, Koni is merely replied upon for the use of a software program that automates an already practiced manual procedure.
- 36. The arguments above are not considered to be persuasive, therefore rejections stand as stated above.

#### Conclusion

1. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Application/Control Number: 09/778,220 Page 12

Art Unit: 3629

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamisue A. Webb whose telephone number is (571) 272-6811.

The examiner can normally be reached on M-F (7:30 - 4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jamisue Webb

JOHN G. WEISS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

KIL